

Manitoba Summer School

WINNIPEG, MANITOBA

TWENTY-SECOND ANNUAL SESSION

*Conducted under the auspices of the
University of Manitoba
and the
Department of Education of Manitoba*



Announcement of Courses

To be offered at

UNIVERSITY OF MANITOBA, FORT GARRY

During July and August, 1933

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Registration July 3rd.

Classes begin 8.30 a.m., July 3rd.

CALENDAR

1933																							
JANUARY								FEBRUARY								MARCH							
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S	
1	2	3	4	5	6	7		....	....	....	1	2	3	4		....	....	....	1	2	3	4	
8	9	10	11	12	13	14		5	6	7	8	9	10	11		5	6	7	8	9	10	11	
15	16	17	18	19	20	21		12	13	14	15	16	17	18		12	13	14	15	16	17	18	
22	23	24	25	26	27	28		19	20	21	22	23	24	25		19	20	21	22	23	24	25	
29	30	31	....	....	....	....		26	27	28	....	....	....	....		26	27	28	29	30	31	....
....	
APRIL								MAY								JUNE							
....	....	....	....	....	....	1		....	1	2	3	4	5	6		....	....	....	....	1	2	3	
2	3	4	5	6	7	8		7	8	9	10	11	12	13		4	5	6	7	8	9	10	
9	10	11	12	13	14	15		14	15	16	17	18	19	20		11	12	13	14	15	16	17	
16	17	18	19	20	21	22		21	22	23	24	25	26	27		18	19	20	21	22	23	24	
23	24	25	26	27	28	29		28	29	30	31	....	....	....		25	26	27	28	29	30	....
30	....	....	....	....	....	....		....	....	....	....	....	....	....		....	....	....	....	....	....	....
JULY								AUGUST								SEPTEMBER							
....	....	....	....	....	....	1		....	....	1	2	3	4	5		....	....	....	....	1	2		
2	3	4	5	6	7	8		6	7	8	9	10	11	12		3	4	5	6	7	8	9	
9	10	11	12	13	14	15		13	14	15	16	17	18	19		10	11	12	13	14	15	16	
16	17	18	19	20	21	22		20	21	22	23	24	25	26		17	18	19	20	21	22	23	
23	24	25	26	27	28	29		27	28	29	30	31	....	....		24	25	26	27	28	29	30	
30	31	....	....	....	....	....		....	....	....	....	....	....	....		....	....	....	....	....	....	....
OCTOBER								NOVEMBER								DECEMBER							
1	2	3	4	5	6	7		....	....	....	1	2	3	4		....	....	....	....	1	2		
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7	8	9	
15	16	17	18	19	20	21		12	13	14	15	16	17	18		10	11	12	13	14	15	16	
22	23	24	25	26	27	28		19	20	21	22	23	24	25		17	18	19	20	21	22	23	
29	30	31		26	27	28	29	30		24	25	26	27	28	29	30	
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MANITOBA SUMMER SCHOOL, 1933

HISTORICAL SKETCH

The Manitoba Summer School had its humble beginning in a summer class conducted in the Carlton School, Winnipeg, in 1910 by Mr. W. J. Warters, supervisor of manual training in the Winnipeg schools. Nineteen students received instruction in fretsaw and other light woodwork and in raffia and rattan work. In 1911 twenty-one students were in attendance.

In 1912 the activities of the school were carried on in the Kelvin Technical High School and the programme was extended to cover the manual training programme generally of the elementary school, and dress-making as well. At the same time a class in Nature Study under the direction of Mr. H. W. Watson and Dr. C. J. Triggerson was added. The attendance in the initial year of the enlarged programme was about seventy and by 1915 this had grown to one hundred.

In 1916 a class for the instruction of teachers in schools containing a considerable proportion of pupils of non-English parentage was opened in the Strathcona School under Mr. W. J. Sisler. About forty students enrolled in this class. In the same year instruction in playground direction was given both at the Strathcona and the Kelvin Schools.

The programme thus elaborated was carried on during the two summers following, until in 1919, when Mr. C. K. Newcombe, B.A., LL.B., Supt. of Education for Manitoba, arranged for the transfer to the Manitoba Agricultural College with Mr. W. J. Warters as Director and Mr. D. S. Woods as Associate Director. At this time a review course in Chemistry of Grade XI under Mr. E. Knapp was added and in the following year courses in Primary and Intermediate Methods, Music and Drawing, and in Sewing and Millinery were introduced. The attendance in 1919 was seventy and in 1920, one hundred and ten. Mr. D. S. Woods was made Director in 1920.

The year 1921 marks the beginning of real expansion in the work of the Summer School for in that year, for the first time, courses in Chemistry and Physics of Grade XII under Professors Geddes and Lee were offered, and for the first time, too, courses were given in connection with the examination for First Class Professional Certificates. The attendance in 1921 was 240; in 1922, 300; in 1923, 350.

Simultaneously with the Summer School at Manitoba Agricultural College in 1923, classes in University subjects of the First and Second Years in Arts and Science were held at the University Arts buildings in Winnipeg with an attendance of 85. This School was organized and directed by Dean Tier and was the initial venture of the University of Manitoba itself in the field of summer school instruction, except for a summer course for returned soldiers conducted in 1919 under the direction of Professor N. B. MacLean, which enrolled 125 students, and a further course for some fifty returned men in the summer of 1920, supplementing the work done in this direction during the preceding winter season by Mr. E. Burgess.

In 1924 another forward step was taken and it was decided to merge in one organization and one programme the Summer Schools of the Department of Education and of the University. Mr. R. B. Vaughan, Director of Technical Education for the Department of Education, became Secretary of a Joint Advisory Committee, Mr. D. S. Woods,

Director of the School, and Dean Tier, of the University Faculty of Arts and Science, Dean of its Faculty. As a result of this consolidation it was possible to strengthen and enlarge the programme of instruction and for the first time to impose a definite scale of tuition fees. From this time forward the growth of the School has been steady and gratifying. The enrolment in successive years has been as follows: 1924, 466; 1925, 561; 1926, 648; 1927, 774; 1928, 751; 1929, 867; 1930, 887; 1931, 1009; 1932, 987. In 1926, Mr. H. G. Mingay, Registrar of the Department of Education, succeeded Mr. Vaughan as Secretary of the Committee.

In 1922 a special lecture course on topics of pedagogic interest was inaugurated. Noonday addresses were given weekly in the dining-hall. In 1923 such addresses were given weekly in the evening in one of the lecture halls. In 1924, 1925, 1926, 1927, 1928, 1929 and 1930 a special two weeks' course was given by Dr. M. E. Hagarty, Dr. R. L. Finney, Dr. M. S. Pittman, Professor W. J. Alexander, Professor Chester Martin and Professor Edward Davison, Professor Wilkinson and Professor Leppard respectively.

During the Session of 1930 a course in Education, leading to the degree of Master of Arts was offered. Sixteen students were enrolled in the classes of 1930, twenty-five in those of 1931 and twenty-five in 1932. Dr. Peter Sandiford, Professor of Education in the University of Toronto, conducted two of the six courses offered at the Session of 1931. Dr. F. Engelhardt, of Minnesota University and Dr. W. F. Dyde, of Colorado University, assisted during the Session of 1932.

SUMMER SCHOOL ALMANAC, 1933

1932

Dec. 10—Application by mail for classes in subjects of the Senior Division in Arts and Science.

1933

April 19—Summer School Reunion Dance, Wednesday of Easter Week.

June 1—Final Announcement of Courses Offered.

1-27—Students may register and pay fees at Dean Tier's Office in the University of Manitoba.

July 3—Registration for Summer School Classes at the Agricultural College, 8 a.m.-6 p.m.

3—Lectures in all classes begin.

4—Meeting of retiring Social Committee.

5—Election of representatives to the Social Committee.

6—First meeting of the incoming Social Committee at 4.30 p.m.

7—Reception in the Auditorium.

14—Social Evening in the Auditorium at 8 p.m.

24—Second Term commences.

28—Close of four-week Lecture Courses; Social Evening at 8 p.m.

Aug. 4—Social Evening in the Auditorium at 8 p.m.

11—Final Examinations begin.

12—Examinations close.

14—Last day for receiving examination returns.

16—Meeting of the Advisory Committee at 2 p.m.

OFFICERS OF ADMINISTRATION

JAMES A. MACLEAN, Ph.D., LL.D.

President, University of Manitoba

ROBERT FLETCHER, B.A., LL.D.

Deputy Minister of Education

D. S. WOODS, M.A.

Director of Summer School

W. TIER, M.A.

Dean of Faculty

H. G. MINGAY, M.A.

Registrar, Department of Education

ADVISORY COMMITTEE ON SUMMER SCHOOL

ROBERT FLETCHER, B.A., LL.D. (Chairman)

Deputy Minister of Education

MOST REV. S. P. MATHESON, D.D., D.C.L.

Chancellor, University of Manitoba

JAMES A. MACLEAN, Ph.D., LL.D.

President, University of Manitoba

W. C. McKILLICAN, B.S.A.

Dean, Faculty of Agriculture, University of Manitoba

W. A. McINTYRE, B.A., LL.D.

Principal, Provincial Normal School

D. S. WOODS, M.A.

Inspector of Schools

WILLIAM TIER, M.A.

Dean, Faculty of Arts and Science, University of Manitoba

W. J. SPENCE, B.A., LL.D.

Registrar, University of Manitoba

G. A. SPROULE, B.A.

Registrar, Manitoba Agricultural College

A. A. HERRIOT, B.A.

Inspector of Schools

H. G. MINGAY, M.A. (Secretary)

Registrar, Department of Education

SUMMER SCHOOL STAFF, 1932

Director—D. S. Woods, M.A.*Dean of Faculty*—W. TIER, M.A.

O. T. ANDERSON, M.A., B.Sc.	Mathematics
W. A. ANDERSON, M.A., M.Sc.	Physics
H. P. ARMES, B.Sc., Ph.D., F.C.I.C.	Chemistry
R. F. ARGUE, M.A.	English
A. D. BAKER, M.A.	French
MISS CELINE BALLU, M.A.	French
G. W. BARTLETT, M.A.	Professional
W. B. BEER	Professional
MISS M. M. BROOKER, M.A.	French
F. W. CLARK, B.A., Ph.D.	Latin
W. A. COWPERTHWAIT, M.A.	Professional
JOHN CRAIG, B.A.Sc.	Dramatic Art
MRS. NINA DEMPSEY, A.T.C.M.	Music
W. F. DYDE, Ph.D.	M.A. Education
F. ENGELHARDT, Ph.D.	M.A. Education
J. A. S. GARDNER, B.A.	Latin
W. F. GEDDES, B.S.A., M.A., M.S., Ph.D., F.C.I.C.	Chemistry
H. C. GRANT, B.S.A., M.A., Ph.D.	Political Economy
KENNETH GUNN, M.Sc.	Zoology
J. H. HEINZELMANN, B.A., Ph.D.	German
J. HOOGSTRAATEN, B.Sc.	Engineering
A. W. HOOPER	Professional
JOSEPH HOWE, M.A.	History
SKULI JOHNSON, M.A.	Latin
WATSON KIRKCONNELL, Ph.D.	English
J. W. LAWSON, M.A.	Mathematics
C. W. LOWE, M.Sc.	Botany
A. E. MACDONALD, M.Sc.	Engineering
MRS. U. MACDONNELL, M.A., Ph.D.	History
H. MCINTOSH, M.A.	M.A. Education
W. A. MCINTYRE, B.A., LL.D.	Professional
MRS. JOHN MENZIES	English
T. H. MILNE, M.A.	Engineering
MISS ELSIE MOORE, B.A.	History
ANDREW MOORE, B.A., B.Sc., LL.B.	Professional
A. J. PERRY, M.A.	English
MISS BERTHA PILLING	Professional
H. E. RITER, M.A.	M.A. Education
MISS DORIS SAUNDERS, M.A.	English
E. W. SELLORS	Professional
R. M. STEVENSON, B.A.	Professional
L. A. H. WARREN, M.A., Ph.D., F.R.A.S., A.A.I.A., A.A.S., F.C.A.S.	Astronomy
H. W. WRIGHT, B.A., Ph.D.	Psychology
D. S. Woods, M.A.	M.A. Education

HERMAN JOHNSON	Demonstrator in Physics
H. V. KIDD, B.Sc.	Demonstrator in Chemistry
C. C. NEUFELD	Demonstrator in Physics
ERNEST SOLOMON, B.Sc.	Demonstrator in Chemistry
LAWRENCE SWYERS, B.Sc.	Demonstrator in Chemistry

Student Deans—MISS DOROTHY MUDGE, B.Sc., T. EMMERSON, J. J. JACKSON

GENERAL INFORMATION

The Manitoba Summer School is conducted under the auspices of the University of Manitoba and of the Manitoba Department of Education, and is held at the University Buildings, Fort Garry. The courses are open to those qualified to undertake the work. Teachers or students previously registered or whose standing has been accepted are eligible without credentials other than those asked for on the application form. Other prospective students should forward with their applications evidence of the standing claimed.

Purpose of Summer School

1. To enable members of the teaching profession to associate themselves in their vacation with instructors and with each other, to become better equipped to carry on with a modernized curriculum; to pursue specialized study in methods of teaching and to improve their academic or professional standing.
2. To enable University students to undertake subjects of the Junior Division in Arts and Science or to remove deficiencies in subjects of this Division or in pre-matriculation languages.
3. To provide an opportunity for contact with outstanding educationists.

Registration

Registration will take place on Monday, July 3rd. The instructors will be present for consultation concerning the work of their courses and students should register on this date and have all books and material ready for their classes, which will begin promptly at 8.30 a.m., Monday, July 3rd. Students should make a careful study of this Calendar before registration. Those registering in University Courses should provide themselves with the University Arts and Science Calendar before the date for registration. A copy of the Calendar may be obtained on request from Dr. W. J. Spence, Registrar of the University.

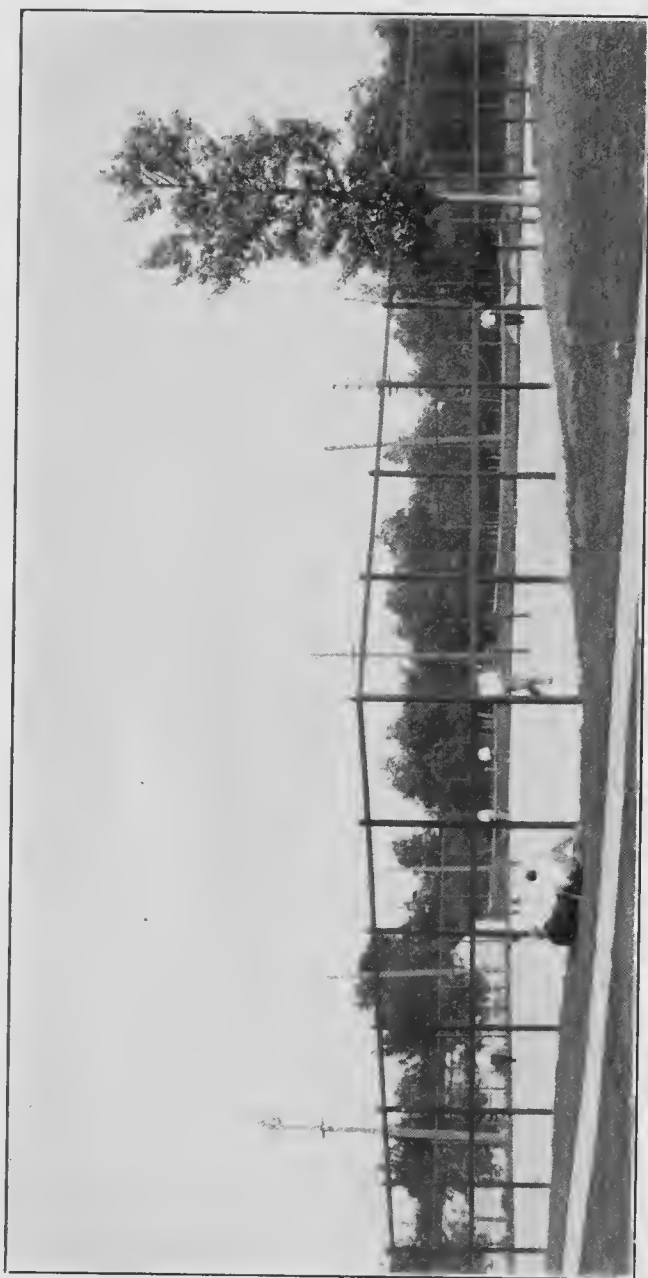
Students may register for the 1933 session at the office of the Dean at the University Buildings, Kennedy Street, from June 1st to June 24th, 1933, both days inclusive.

Application

Application for courses should be made as early as possible to the **Secretary of the Summer School Committee, Department of Education.** Application for courses not listed in this announcement will be considered up to June 1st, but no courses outlined herein or otherwise proposed will be given unless a sufficient number of applications is received on or before the date specified.

Advance Registration

Summer school students may secure rooms in advance for the 1933 session. This may be done by making application to Dean Tier, University of Manitoba, and accompanying the Preliminary Application Form with a cheque in favor of Manitoba Summer School, *payable at par in*



THE SUMMER SCHOOL TENNIS COURTS

Winnipeg, and covering not only the required fee for Board and Room, but also the Student Organization Fee of \$2 and the prescribed fees for the subject or subjects elected. Students should consult the Summer School Calendar to ascertain the *exact* amount of fees to send in. Such students must present themselves for classes on July 3rd. After June 24th registration and allotment of rooms will take place only on July 3rd at the Summer School Offices at the University Buildings, Fort Garry.

Enrolment

Enrolment will be limited. Applications will be considered in the order of their receipt at the office of the Secretary.

The following fees are payable at registration:

Fees for courses elected (see page 35) and charges for board and room (if the student is to reside at the college).

Note—The Course Fee covers tuition, laboratory charges (if any) and examination.

Student's Organization Fee, to be paid by all students taking courses at the Summer School.....\$2.00

University Registration Fee (required only from those who desire credit on a degree or diploma course and are registering for University Examinations for the first time).....\$2.00

Attendance

Students are required to attend regularly from the opening day of the term.

The University Book Department

The University Book Department, which has operated a store in the Kennedy Street Building for a number of years, has this year opened an additional store in the New Arts Building at Fort Garry. This store is located on the lower floor of the building and Summer School students will find the store a great convenience in obtaining textbooks, notebooks and other materials needed in the classroom. Students are urged to make full use of the facilities provided. Owing to the short time available during the Summer School term, it is advisable to secure at least some of the books prior to the opening of the session. Mail orders are promptly filled.

The Book Department is not a private undertaking but is operated directly by the University and all prices are the very lowest possible.

Address all orders to: University of Manitoba Book Department, Kennedy Street, Winnipeg.

Residence Accommodation

On arrival in Winnipeg, students should proceed to the College and register, and be prepared to pay the following fees in advance at the time of registration.

Board and Room—Students will be required to pay for board and room at the same rate charged by the College to their regular students. For 1933, this will be \$28.00 for 4 weeks; \$42.00 for 6 weeks. The charge for moving trunk will be \$1.00.

Cheques should be made payable to the Manitoba Summer School, and must be presented in person. Room keys must be returned to the Bursar's Office before leaving residence.

Baggage checks for trunks should be handed to the Bursar, who will arrange for their transportation from the station to the College. Students are particularly requested to have their names on their trunks and to bring their hand baggage with them and thus avoid loss or delay.

DAILY PROGRAM OF CLASSES

Monday to Friday

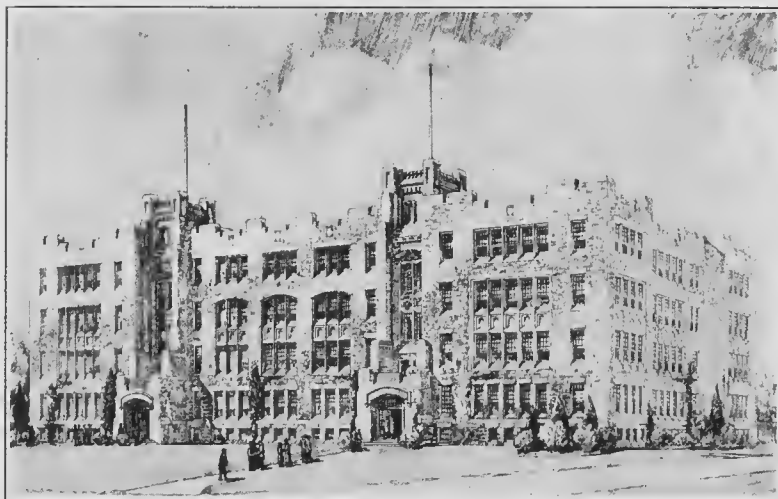
This time table will be effective beginning 8.30 a.m., Monday, July 3rd. Laboratory periods for Science subjects will be arranged by the instructors at the opening of the session.

Morning

8.30 to 9.20	—Reading and Oral Expression, Grades I to III.....
	Pupil Study Habits.....
	Latin Grammar, Grade XI.....
	Elementary German.....
	German I.....
	French Grade XII and French I, Authors.....
	Chemistry Grade XII and Chemistry I.....
	Latin Grade XII and Latin I, Prose.....
	Zoology II.....
	Latin II.....
	French II, Practice.....
	English Grade A and English III.....
	English IV.....
9.30 to 10.20	—Art, Grades I to III (Including Handwork).....
	Tests and Measurements.....
	Latin Authors, Grade XI.....
	Elementary German.....
	German I.....
	Chemistry Grade XII and Chemistry I.....
	French Grade XII and French I Grammar.....
	Latin Grade XII and Latin I Authors.....
	Zoology II.....
	Latin II.....
	French II Authors.....
	Trigonometry Grade XII, Mathematics IA and IIA.....
	English Grade A and English III.....
	English IV.....
10.30 to 11.20	—Reading, Grades IV to VI.....
	Modern Theories of Education.....
	French Grammar, Grade XI.....
	Algebra Grade XII and Algebra I.....
	Physics Grade XII and Physics I.....
	Optional English and English II, Literature.....
	Calculus II.....
	French III.....
	Experimental Psychology III.....
	Economics III.....
	Economics IV.....
11.30 to 12.20	—Teaching Composition and Grammar.....
	Geography Grades VII to IX.....
	French Authors Grade XI.....
	Geometry Grade XII and Geometry I.....
	Physics Grade XII and Physics I.....
	Optional English and English II Prose.....
	Geometry II.....
	French III.....
	Economics III.....
	Economics IV.....
	Social Psychology III.....

Afternoon

- 2.00 to 2.50—Music Methods Grades I to IX
 Junior High School Science, Biology
 Elementary French
 English Grade XII and English I Prose
 Botany II (2.00 to 5.00)
 History Grade XII and History I
 History II
 History III
 Sociology III
 History IV...
- 3.00 to 3.50—Art Grades IV to IX
 Music Appreciation Grades I to IX
 Teaching Junior French Grades VII to IX
 Elementary French
 English Grade XII and English I Literature
 History Grade XII and History I
 History II
 History III
 Sociology III
 History IV..
- 4.00 to 4.50—Art Appreciation
 School Organization and Management
- 7.00 to 8.30—Astronomy—Three evenings per week beginning
 Tuesday, July 4th



NEW SCIENCE BUILDING ON THE FORT GARRY SITE

IMPORTANT NOTICE

The full benefit from short intensive courses, such as the Manitoba Summer School offers, can be secured only when the student has prepared himself in advance by a period of private study. Outlines and directions for this home study have been prepared in English and in History and will be sent to applicants for these courses upon receipt of the preliminary application form. These directions and outlines are intended not to supersede the texts but rather to assist the student in making use of them.

Beginning with the Summer School Session of 1933, advance work will be required of all students taking courses in the Senior Division of Arts and Science. Students should register for these courses not later than December 10th, 1932, and should be prepared to commence extension work by the first of January, 1933. The following courses will be offered for the session of 1933 providing a sufficient number of students register: English III, English IV, History III, History IV, Political Economy III, Political Economy IV, Sociology III, French III, Physics II, Chemistry II.

Students shall not register for more than eight units of Senior Division work. Those registering for eight units must commence the extension work not later than January 2nd, 1933. It is important that registration should be made not later than December 10th, 1932, as the number enrolling will determine the courses to be offered. All advance work, irrespective of the number of units for which the student is seeking credit, must be completed before the commencement of the Summer School session. More specific instructions will be given the students upon registering in these courses.

Students attempting but four units of work of the Senior Division in Arts and Science may do all of their advance preparatory work in May and June, but all of the required preparatory work must be completed before July 1st, 1933.

The cost per subject of four units will be \$25.00, five dollars of which shall be paid upon registration in December. Applications should be forwarded directly to Dean Tier, University of Manitoba, together with the fee.

OUTLINE OF THE COURSES

TEACHER TRAINING COURSES, 1933

<i>Course</i>	<i>Instructor</i>
1. Art, Grades I to III (Including Handwork).....	Miss B. Pilling
2. Music Methods, Grades I to IX.....	Mrs. C. A. Dempsey, A.T.C.M.
3. Music Appreciation, Grades I to IX.....	Mrs. C. A. Dempsey, A.T.C.M.
4. Reading and Oral Expression, Grades I to III.....	Miss B. Pilling
5. Reading, Grades IV to VI.....	W. B. Beer
12. Art, Grades IV to IX.....	Miss A. Hammell, B.A.
13. Art Appreciation.....	Miss A. Hammell, B.A.
17. Teaching Junior French, Grades VII to IX.....	Miss M. M. Brooker, M.A.
19. Junior High School Science, Biology.....	Andrew Moore, B.A., B.Sc., LL.B.
21. Teaching Composition and Grammar.....	W. B. Beer
22. Geography, Grades VII to IX.....	R. M. Stevenson, B.A.
30. Pupil Study Habits.....	Geo. Bartlett, M.A.
32. Tests and Measurements.....	Geo. Bartlett, M.A.
33. Modern Theories of Education.....	R. M. Stevenson, B.A.
35. School Organization and Management.....	Andrew Moore, B.A., B.Sc., LL.B.

Advance work will be required of all students entering the Professional Courses. Application for these courses should be made not later than January 1st, 1933, to the Secretary of the Summer School Committee, Department of Education. For further information concerning professional courses, students should consult the November issue of the *Western School Journal*, and the special pamphlet issued by the Department of Education, dealing with these courses.

The fee for each course will be \$7.00, two dollars of which must be paid in advance with the application for admission to the course.

Teachers who have partial First Class Professional standing may complete their course by selecting the equivalent from the new plan of professional courses. In doing so they should first consult the Registrar of the Department of Education.

It should be distinctly understood that while the Summer School is conducting these professional classes, the selection of courses should be made after consultation with the Department of Education, more especially where the student is required to make his or her selection from a limited number of courses.

COURSES LEADING TO THE DEGREE OF MASTER OF ARTS IN EDUCATION

<i>Lecture hour</i>	<i>Course</i>	<i>To be offered during 1933</i>
9.30 a.m.	3. General History of Education.....	William Boyd, Ph.D.
8.30 a.m.	6. Problems of Education Administration and Supervision.....	D. S. Woods, M.A.
10.30 a.m.	9. The Curriculum.....	William Boyd, Ph.D.

Lectures will commence Wednesday, July 12th (See page 33).

UNIVERSITY AND NON-PROFESSIONAL COURSES

Non-professional Courses, except as otherwise specified, will begin on Monday, July 3rd, and will continue for six weeks.

A student will not be permitted, except in special circumstances, to elect more than two subjects from the non-professional courses. An effort will be made to cover within the term of the Summer School all of the work of the subjects undertaken, as outlined for a full annual session in the regular classes, but whether or not this can be accomplished will depend, in the case of a student taking class work for the first time in the subject in question, upon the amount of *private study* he has given to it in advance. In order to be profitable, some preparatory work must be done. We are sure teachers and students feel the necessity of this and to assist our students in their work before coming to the Summer School outlines have been prepared in almost every subject. These outlines are sent to each student immediately he registers for a course. Students who register early have the advantage of this additional assistance, and by planning their work in accordance with the outlines are able to appreciate the lectures better and get much more from their course.

Examinations of ordinary University and Departmental standards will be provided during the concluding days of the Summer School term, to which will be admitted such students of the various classes as are recommended by their instructors. The instructor of each class is empowered to withhold recommendation for examination in the case of any of his students whose class record and attainment do not, in his opinion, justify immediate examination, and to require such to come up for examination later, after a further period of private preparation, say in September or at the December and April examinations of the ensuing session. *The Summer School reports on these examinations will be accepted for credit by the University and the Department of Education only where the student has fully met the requirements of these respective bodies as to eligibility. It would be well, where any doubt exists on this point, for the applicant to consult the Registrar of the University or the Registrar of the Department of Education in advance of registration.*

Students should consult the 1932-1933 University Calendar for Arts and Science and the Programme of Studies of the Department of Education for 1932-1933 for further information regarding the courses outlined below.

ASTRONOMY

Astronomy II.

A study of the summer skies; methods of locating celestial objects; the shape and motions of the earth; the sun and eclipses; the moon; the planets; comets and meteors; stars and nebulae; ancient and modern conceptions of the Universe; recent astronomical discoveries. Lectures illustrated with lantern views; observational meetings arranged. Text book, *An Introduction to Astronomy* by F. R. Moulton (MacMillan).

Three evenings per week; lectures one and one-half hours each.

BOTANY

Botany II—Courses 1, 2, 3, 4.

1, 2. **General Botany.** An introductory lecture course covering, among other topics, the following: Classification of objects; comparison of living and non-living matter; the differences between animals and plants. The structure of the seed and contents of its cells; the seeds of the pea, bean, castor oil plant, and date palm; the grains of wheat and corn; the

conditions for germination, and the phenomena accompanying it; the exhaustion of the reserve food-stuffs. The seedling: its structure, mode of development and relations with external conditions; the theory of irritability; geotropism, heliotropism and hydretropism; the further development of shoot and root. The general morphology of the plant body, and the principal modifications of the stem, leaf and root; buds, grasshauks, stolons, runners, rhizomes, corms, tubers, bulbs, spines and thorns, tendrils, cladodes, phyllodes, compound leaves, etc.; the growing point of stems; the origin of new leaves and buds. The cell and the cell theory; protoplasm as the physical basis of life; protoplasmic movement; turgidity; the structure and division of the nucleus; the origin of new cells by cell division. The internal morphology of the stem of monocotyledons and of dicotyledons; the functions of vascular bundles; the cambium and the secondary thickening of stems and roots; the secondary protective tissues, cork and bark. The leaf as an organ for carrying on the process of photosynthesis; the epidermis, including hairs and stomata, vascular bundles, mesophyll, and intercellular spaces; photosynthesis (carbon assimilation); the nature and function of chlorophyll corpuscles and of chlorophyll; the evacuation of the products of photosynthesis and their ultimate fate. The root; its root-tip, root hairs, and mode of branching; the growing point. Climbing plants; stem-climbers and tendril climbers; the physiology of climbing; lateral geotropism, reactions to the stimulus of contact. The elementary facts in the nutrition of the plant; the nature and sources of the raw food materials; the necessary chemical elements and their mode of absorption, water cultures; the constitution of the soil; the transpiration current; transpiration; photosynthesis; the products of metabolism, together with their distribution, storage, and utilization; respiration, contrasted with photosynthesis. Carnivorous plants; *Drosera*, *Utricularia*, *Sarracenia*, *Dionaea* and *Nepenthes*. The classification of plants, including the main subdivisions of the vegetable kingdom; the morphology and physiology of the following *Thallophyta*: *Protococcus* (*Pleurococcus*) *Saccharomyces* (yeast), *Bacteria*, *Spirogyra*, *Fucus*, *Mucor*, *Penicillium*, *Psalliotia campestris* (mushroom). Alcoholic fermentation; *Bacteria* as the cause of nitrogen fixation, of fermentative processes, of putrefaction, and of disease. The *Bryophyta*, illustrated by a moss plant; the *Pteridophyta*, illustrated by a fern plant; alternation of generations. Reproduction in the *Phanerogamia*; the flower and its chief modifications in structural plan; the minute structure of the pollen grain and of the ovule; Pollination and its agents; floral mechanisms as illustrated by the *Lady Slipper Orchid*, *Primula*, *Salvia*, etc. Fertilization of the ovule; development of seeds and fruits; the plum, strawberry, orange, coconut, etc.; dispersion of seeds and fruits; the nature of pine cones, both male and female.

3, 4. **Laboratory Course in General Botany.** This course is designed to accompany courses 1, 2.

CHEMISTRY, GRADE XII.

Chemistry XI is a prerequisite for Chemistry Grade XII

Texts: *Outline of Experiments in Practical Chemistry, Grades XI and XII.* (Price, 20 cents.)

McPherson & Henderson: *An Elementary Study of Chemistry. Introductory College Course.* (Price, \$2.40.) Omit chapters I, II, III, IV, XI, XIII, XX, XXXVI, XXXVII, XL, XLI, XLII, XLIII, XLIV.

2. Water supplies. Purification of water. Industrial softening of water. Disposal of sewage.

3. Kinetic theory, and its relation to gas laws. (Boyle, Charles, Henry, Dalton). Diffusion. Vapor pressure.

4. Solutions. Standard solutions. Osmotic pressure. Boiling and freezing points. Conductivity. Ionization. Electrolysis.

5. Ionic Reactions. Neutralization. Heat of neutralization. Behaviour of acids, bases and salts in solution. Classification of salts. Hydrolysis.

6. Equilibrium and mass action. Equations. Thermal equations. Colloids.

7. Determination of combining, atomic and molecular weights. Avogadro's Principle.

8. Matter. Structure of matter—molecules, atomic structure (protons and electrons).

9. Valency. Loss and gain of electrons. Oxidation and reduction.

10. Oxides and acids of nitrogen. Anhydrides. Fixation of nitrogen. Nitrogen cycle. Fertilizers.

11. Compounds of carbon (organic compounds). Hydrocarbons. Alcohols. Acids. Esters. Soap. Carbohydrates. Fuels, and heat of combustion. Coal tar. Dyes. Explosives. Cellulose and cellulose products.

12. Mendeleeff's Periodic Law and classification. Atomic numbers. Uses.

General Note referring to following sections

Study of groups of elements, emphasizing relation of groups to Periodic Classification: a study of selected members of each group with regard to occurrence, preparation (or extraction), properties of element and its important compounds, and uses, including industrial applications.

Zero Group.

Group I. Sodium, potassium, copper, silver, gold.

Group II. Calcium, magnesium, zinc, mercury.

Group III. Boron, aluminium.

Group IV. Silicon, tin, lead.

Group V. Phosphorus.

Group VI. Sulphur.

Group VII. Halogens.

Group VIII. Iron, cobalt, nickel.

ENGLISH

Grade XII—English and English I—Courses 1, 2.

Grade XII Optional English and English II—Courses 3, 4.

Grade "A"—English and English III—Courses 5, 6, 7, 8.

English IV—Courses 9, 10, 11, 12.

Composition—(One paper). Grade XII students.

The writing of an essay of not less than eight hundred words on one of a number of subjects.

All the following points will be considered in marking the composition:—elegance; force; clearness; plan (unity, sequence, proportion); paragraph structure, unity, sequence; sentence structure; choice of words.

The following are suggested as suitable reference books in Composition in Grade XII:

- (a) Tanner: *Composition and Rhetoric* (Ginn & Co.).
- (b) *Model Class Books of English, Books V and VI* (Blackie & Co.).
- (c) *Literary Reading and Composition, Senior Course* (Blackie & Co.).
- (d) Newbolt Series: *English in Upper Forms* (Thos. Nelson & Son.).

1, 2. **English Poetry and Prose.** An introductory survey of English Literature, Poetry and Prose.

(1) First Term: (a) **English Poetry.** Text: Greater English Poets, edited by Crawford, Perry, and Woodhouse (Macmillan). The following poems:
 Jonson—Selections in text;
 Donne—Selections in text;
 Herrick—Selections in text;
 Herbert—Selections in text;
 Milton—On Shakespeare; L'Allegro; Il Penseroso; Sonnets II, VIII, XIII, XIX, XXII, XXIII;
 Dryden—Absalom and Achitophel; Alexander's Feast;
 Pope—The Rape of the Lock;
 Gray—Ode on a Distant Prospect of Eton College; Elegy Written in a Country Churchyard;
 Goldsmith—The Deserted Village;
 Cowper—On the Receipt of My Mother's Picture; To Mary; The Castaway;
 Blake—Selections in text;
 Burns—Selections in text;
 Wordsworth—Simon Lee; Lines Composed a Few Miles Above Tintern Abbey; The Reverie of Poor Susan; We Are Seven; She was a Phantom of Delight; My Heart Leaps up; The Solitary Reaper; At the Grave of Burns; Composed upon Westminster Bridge; On the Sea-Shore near Calais; I Wandered Lonely as a Cloud; The World is too much with us;
 Coleridge—The Ancient Mariner; Kubla Khan;
 Scott—Selections in text.

(b) **English Prose—**

Bible—The Book of Ruth (King James Version);
 Bunyan—Pilgrim's Progress, Part I (Nelson's Classics);
 Swift—Gulliver's Travels, Parts I and II (Macmillan);
 Defoe—Robinson Crusoe, Part I (Nelson's Classics);
 Goldsmith—The Vicar of Wakefield (Nelson's Classics).

(2) Second Term. (a) **English Poetry.** Text: Greater English Poets, edited by Crawford, Perry, and Woodhouse (Macmillan). The following poems:
 Byron—She Walks in Beauty; The Prisoner of Chillon; Selections from Child Harold;
 Shelley—Ode to the West Wind; To a Skylark;
 Keats—The Eve of St. Agnes; Ode on a Grecian Urn; La Belle Dame Sans Merci; Ode to a Nightingale;
 Poe—The Raven;
 Tennyson—The Lady of Shalott; Enone; The Lotos-Eaters; Ulysses; Break, Break, Break; Tithonus; Idylls of the King; Crossing the Bar;
 Browning—Incident of the French Camp; My Last Duchess; Count Gismond; Home-Thoughts, From Abroad; Home-Thoughts, From the Sea; Up at a Villa—Down in the City; Andrea del Sarto; Prospice; Asolando; Epilogue;

Arnold—The Forsaken Merman; To Marguerite; Rugby Chapel;
 Dover Beach;
 Rossetti—Selections in text;
 Swinburne—Selections in text;
 Hardy—Selections in text;
 Watson—Selections in text;
 Carman—Selections in text;
 Yeats—Selections in text;
 Kipling—Selections in text;
 McCrae—Selections in text;
 Masfield—Selections in text;
 Noyes—Selections in text;
 Brooke—Selections in text;
 Arnold—Sohrab and Rustum (Houghton Mifflin Co.).

(b) **English Prose—**

Scott—Kenilworth (Nelson's Classics);
 Dickens—The Old Curiosity Shop (Everyman, Dent);
 Hardy—Far from the Madding Crowd (Macmillan);
 Conrad—The Nigger of the Narcissus (Heinemann).

References: The Story of English Literature, by E. K. Broadus (Macmillan); A Biographical Dictionary of English Literature (Everyman, Dent); Tutorial History of English Literature, by A. J. Wyatt (University Tutorial Press); A History of English Literature, by John Buchan (Nelson); English Men of Letters Series (Macmillan).

3, 4. **English Poetry and Prose.**

(1) First Term. (a) **English Poetry.**

Chaucer—The Prologue to the Canterbury Tales;
 Spenser—The Faerie Queene, Book I, ed., Kitchin (Oxford);
 Milton—Paradise Lost, Book I.

Text: Greater English Poets, edited by Crawford, Perry, and Woodhouse (Macmillan).

Note: The course involves a knowledge of the life and times of the authors read, and an ability to render Chaucer into modern English prose.

References: The Story of English Literature, by E. K. Broadus (Macmillan); Spenser, Milton, in English Men of Letters Series (Macmillan); Chaucer, Spenser, Milton, in Dictionary of National Biography; A Biographical Dictionary of English Literature (Everyman, Dent).

(b) **English Prose.** Bacon—The Essays of Francis Bacon, edited by C. S. Northup (Houghton Mifflin Co.). The following essays: Numbers 1, 5, 10, 11, 13, 16, 17, 18, 23, 27, 29, 36, 42, 50;

Addison—Select Essays of Addison, edited by Samuel Thurber (Allyn and Bacon, Boston). Selections, pages 1-80, 80-89, 104-122, 141-167, 177-180, 187-206, 213-220;

Boswell—A Shorter Boswell, edited by Bailey (Nelson);
 Lamb—Essays of Elia (King's Treasures, Dent).

(2) Second Term. (a) **English Poetry.** Shakespeare—The following plays: Romeo and Juliet; Richard III; Antony and Cleopatra. Texts: The New Hudson Shakespeare (Ginn).

References: An Introduction to Shakespeare, by MacCracken and others (Macmillan); Shakespeare, His Life and Work by Oliphant Smeaton (Everyman, Dent); Biographies of Shakespeare, by Sidney Lee, Joseph Quincy Adams and E. K. Chambers.

(b) English Prose—

Macaulay—History of England, Chapter III (King's Treasuries, Dent);

Carlyle—Signs of the Times; Essay on Burns; Inaugural Address at Edinburgh (Everyman);

Ruskin—The Open Sky; Mountain Glory; Greatness in Art; St. Mark's; Nature of Gothic; Roots of Honour (Modern Student's Library, Scribners);

Arnold—Sweetness and Light; The Function of Criticism; Literature and Science (Houghton Mifflin Co.);

Huxley—On the Advisableness of Improving Natural Knowledge; A Liberal Education; On a Piece of Chalk (Macmillan).

Reference: A Nineteenth Century Literature, by George Saintsbury (Macmillan).

5. Chaucer and English Medieval Literature. A detailed study of Chaucer, and assigned readings in texts of the medieval period.

(a) Chaucer—The Canterbury Tales: The Prologue; The Knightes Tale; The Nonne Preestes Tale; The Pardoners Tale; The Clerkes Tale. Texts: Selections from Chaucer, edited by E. A. Greenlaw (Scott, Foresman); The Clerkes Tale, edited by Kenneth Sisam (Oxford); The Poetry of Chaucer, by R. K. Root (Houghton Mifflin Co.).

(b) Mediaeval Literature—The Wakefield Second Shepherd's Play (Everyman, Dent); Langland's Piers Plowman (Everyman, Dent); French Mediaeval Romances, translated by Eugene Mason (Everyman, Dent); The Mabinogion, translated by Lady Charlotte Guest (Everyman, Dent); Froissart's Chronicles (Everyman, Dent).

References: A Chaucer Handbook, by R. D. French (Crofts); Chaucer and His Poetry, by G. L. Kittredge (Harvard University Press); Some New Light on Chaucer, by J. M. Manly (Holt); Three Medieval Centuries of Literature in England, 1100-1400, by C. S. Baldwin (Little, Brown and Co.); English Literature from the Norman Conquest to Chaucer, by W. H. Schofield (Macmillan).

6. Shakespeare. The Merchant of Venice; Henry V; As You Like It; Hamlet; Othello; Macbeth (New Hudson Shakespeare, Ginn). Introduction to Shakespeare, by MacCracken and others (Macmillan); A Life of Shakespeare, by Joseph Q. Adams (Houghton Mifflin Co.).

References: A Life of Shakespeare, by Sidney Lee (Macmillan); Hamlet, An Ideal Prince, and other Essays, by A. W. Crawford (The Copp Clark Co.); Elizabethan Literature, by Saintsbury (Macmillan); History of English Dramatic Literature, by A. W. Ward (Macmillan); Elizabethan Drama, by F. E. Schelling (Houghton Mifflin Co.).

7. Milton. *(a)* Poetry: Comus; Sonnets; Paradise Lost, Books I, II, III, IV, IX; Samson Agonistes. *(b)* Prose: Of Education; Areopagitica; The Tenure of Kings and Magistrates. Text: Milton's Prose, selected and edited by Malcolm W. Wallace (World's Classics, Oxford).

References: The Tenure of Kings and Magistrates, edited by W. T. Allison (Holt); Milton, by John Bailey (Home University Library); A Milton Handbook, by James H. Hanford (Crofts).

8. Restoration and Eighteenth Century Literature. (Dryden to Burns).

(a) Poetry:

Dryden—*Annus Mirabilis*; *Absalom and Achitophel*, Part I; *Religio Laici*; *The Hind and the Panther*, Part I. Text: Dryden, *Select Poems*, edited by Christie (Oxford);

Pope—*Ode on Solitude*; *Essay on Criticism*; *Elegy on an Unfortunate Lady*; *Essay on Man*; *Epistle to Dr. Arbuthnot*; *To Augustus*; *Epilogue to the Satires*, *Dialogue II*. Text: Pope, *Selected Poems*, edited by Bredvold (Crofts), or by Sherburn (Nelson);

Selections from Dryden, Swift, Pope, Thomson, Johnson, Collins, Gray, Goldsmith (*The Traveller*) in *English Poems, Restoration and Eighteenth Century*, edited by Bronson (University of Chicago Press);

Ballads. Text: *Old English Ballads*, edited by Wm. D. Armes (Methuen).

(b) Prose:

Swift—*Battle of the Books* (Everyman, Dent);

Johnson—*Lives of Cowley and Dryden*, Vol. I (World's Classics);

Boswell—*Life of Johnson*, edited by Chas. S. Osgood (Modern Student's Library, Scribners).

Gibbon—*Autobiography* (World's Classics).

References: *A History of Eighteenth Century Literature*, by Gosse (Macmillan); Dryden, Swift and Pope, in *English Men of Letters Series* (Macmillan); *Dr. Johnson and His Circle*, by Bailey (Home University Library); *A History of English Romanticism in the Eighteenth Century*, by H. A. Beers (Holt).

9. Romantic Poetry.

Wordsworth—*Lines Written in Early Spring*; *Expostulation and Reply*; *The Tables Turned*; *The Old Cumberland Beggar*; *Nutting*; *Three Years She Grew in Sun and Shower*; *Matthew*; *The Prelude*; *Michael*; *Resolution and Independence*; *The Green Linnet*; *Stepping Westward*; *To the Cuckoo*; *Ode to Duty*; *To a Skylark*; *Elegiac Stanzas*; *Character of the Happy Warrior*; *Ode: Intimations of Immortality*; *To a Skylark*; *Scorn Not the Sonnet*;

Coleridge—*Christabel*; *France: An Ode*; *Dejection: An Ode*;

Byron—*English Bards and Scotch Reviewers*; *From Childe Harold's Pilgrimage*; *The Isles of Greece*; *On This Day I Complete my Thirty-Sixth Year*; *Selected Lyrics*;

Shelley—*Hymn to Intellectual Beauty*; *Lines Written among the Euganean Hills*; *Stanzas*; *The Sensitive Plant*; *Epipsychidion*; *Adonais*; *Selected Lyrics*;

Keats—*Sleep and Poetry*; *Isabella*; or *The Pot of Basil*; *Bards of Passion and of Mirth*; *Ode on Melancholy*; *Ode on a Grecian Urn*; *Ode to a Nightingale*; *Lamia*; *To Autumn*; *Sonnets*; *Letters*.

Text: *English Poetry and Prose of the Romantic Movement*, edited by George B. Woods (Scott, Foresman).

References: Wm. Wordsworth, by G. M. Harper (Murray); *The Early Life of Wordsworth*, by E. Legouis (Dodd); S. T. Coleridge, by J. D. Campbell (Macmillan); Byron, by Ethel C. Mayne (Scribners); Shelley, *The Man and the Poet*, by Clutton-Brock (Methuen); Keats, by Sidney Colvin (Macmillan).

10. Victorian Poetry.

Tennyson—*Mariana*; *The Poet*; *A Dream of Fair Women*; *You Ask Me Why*; *Of Old Sat Freedom*; *Love Thou Thy Land*; *Locksley Hall*; *Songs from the Princess*; *In Memoriam*; *Ode on the Death of the Duke of Wellington*; *Maud*; *The Higher Pantheism*; *To Virgil*; *Frater Aveatque Vale*;

Browning—*The Lost Leader*; *The Laboratory*; *Love Among the Ruins*; *Saul*; *By the Fireside*; *Two in the Campagna*; *One Way of Love*; *Another Way of Love*; *The Last Ride Together*; *Porphyria's Lover*; *Childe Roland*; *Karshish*; *Fra Lippo Lippi*; *Abt Vogler*; *Rabbi Ben Ezra*; *Confessions*; *Apparent Failure*;

Arnold—*Sonnet*; *To a Friend*; *Shakespeare*; *Self-Dependence*; *The Future*; *Requiescat*; *The Scholar Gipsy*; *Stanzas from the Grand Charteuse*; *East London*; *West London*; *Growing Old*; *Immortality*; *The Last Word*.

Text: *Victorian Poetry*, edited by C. E. Andrews and M. O. Percival (R. S. Adams, Columbus).

References: *Lives of the above poets in English Men of Letters Series* (Macmillan); *The Literature of the Victorian Era*, by Hugh Walker (Cambridge); *Survey of English Literature, 1830-1880*, by Oliver Elton (Edward Arnold); *History of English Literature*, by Legouis and Cazamian (Dent).

11. The English Novel. Development to the middle of the nineteenth century. Hopkins and Hughes, *Extracts from the English Novel before the Nineteenth Century* (Ginn); Richardson's *Pamela* (Everyman); Fielding's *Joseph Andrews* (Everyman); Goldsmith's *Vicar of Wakefield* (Nelson's Classics); Maria Edgeworth's *Castle Rackrent* (Everyman); Walpole's *Castle of Otranto* (Hopkins and Hughes); Mrs. Shelley's *Frankenstein* (Everyman); Scott's *Heart of Midlothian* (Nelson's Classics); Jane Austen's *Pride and Prejudice* (Nelson's Classics); Dickens's *Oliver Twist* (Nelson's Classics); Hawthorne's *The Scarlet Letter* (Everyman); Thackeray's *Henry Esmond* (Nelson's Classics); George Eliot's *Middlemarch* (Collins); Text: *Development of the English Novel*, by W. L. Cross (Macmillan).

References: *The English Novel* (to Scott), by Sir Walter Raleigh (Murray); *The Advance of the English Novel*, by Wm. Lyon Phelps (Macmillan); *Motives in English Fiction* (to Dickens), by Robt. N. Whiteford (Putnam).

12. Victorian and Georgian Prose. Imaginative prose from the middle of the nineteenth century to the present.

Landor's *Imaginary Conversations* (World's Classics); Borrow's *Lavengro* (Everyman); Stevenson's *Virginibus Puerisque* (Everyman); Pater's *Marius the Epicurean* (Macmillan); Meredith's *Ordeal of Richard Feverel* (Scribners); Hardy's *Return of the Native* (Scribners); Stevenson's *Master of Ballantrae* (Macmillan's Pocket Classics); Barrie's *The Little Minister* (Cassell); Wm. De Morgan's *Joseph Vance* (Nelson); Conrad's *Lord Jim* (Doubleday); Bennett's *Old Wives' Tale* (Nelson); Galsworthy's *The Man of Property* (Heinemann).

References: *Development of the English Novel*, by W. L. Cross (Macmillan); *The Modern English Novel*, by Abel Chevalley (Macmillan); *A Century of the English Novel*, by Cornelius Weygandt (Century Co.).

FRENCH

Elementary French—Course A.

Grade XI—French—Courses B, C.

Grade XII—French and French I—Courses 1, 2, 3, 4.

French II—Courses 5, 6, 7, 8.

French III—Courses 9, 10, 11, 12.

A. (1) **New Elementary French Grammar**, Lessons I-XXIX, inclusive.

(2) Conjugation of the irregular verbs: conduire, construire, cuire, luire, nuire, taire, faire, plaire, lire, confire, suffire, dire, hair, écrire, boire, croire, fuir, payer, employer, appuyer, envoyer, asseoir, inclure, conclure, rire, perdre, vendre, voir, finir, naître, connaître, croître, partir, sentir, mentir, repentir, dormir, bouillir, servir, mettre, suivre, battre, vivre, craindre, peindre, joindre, résoudre, dissoudre, absoudre, coudre, moudre, prendre, vaincre, mouvoir, pouvoir, savoir, devoir, recevoir, vouloir, falloir, valoir, aller, venir, tenir, mourir, acquérir, appeler, jeter, mener, geler, acheter, ouvrir, souffrir, offrir, assaillir, cueillir.

(3) **The French Reader**—Part II (Ryerson Press).

One of the following will be found very helpful in studying the Verb: Short Theory of the Conjugation of the French Verb —Muller (Copp, Clark Co.), Passe-Partout Verb Leaf—Baker (Russell, Lang & Co.).

French

B. (a) **Grammar**. Special emphasis should be placed upon the following essentials of French Grammar:

(1) The inflection of nouns and adjectives.

(2) The inflection of the verb, including the full conjugation of all the commonly used irregular verbs.

(3) Tense auxiliaries, the reflexive verb, and the agreement of the past participle.

(4) Pronouns, including demonstrative, interrogative, relative, and indefinite pronouns and the order of pronoun objects.

(5) Conditional sentences and the use of the subjunctive mood.

Text: Fraser & Squair: *New Elementary French Grammar* (Copp, Clark Co.).

(b) **Prose**. (1) The translation into French of short sentences as a test of the student's knowledge of correct grammatical forms and structures and of conversational idiom. (2) The translation into French of easy continuous passages of a similar character, designed to test the extent of the student's active working vocabulary concerning every day things and activities.

(c) **Composition**. The writing of short original compositions concerning every day topics involving the reproduction of the material of the Grammar and its exercises.

C. **Authors and Sight**. (a) The reading of the following texts, upon which passages may be set upon the examination.

Labiche et Martin: *La Poudre aux Yeux* (edited by E. Sonet).
(Price, .60.)

Parker: *Favorite French Stories*. (Price, .85.) The following selections: De Maupassant: *La Parure*, *Mon Oncle Jules*, *En Voyage*; Daudet: *Installation*, *La Dernière Classe*, *Le Secret de Maître Cornille*, *L'Elixir du Révérend Père Gauchre*.

The chief aim in the authors work should be to acquire a feeling for the language and to make the vocabulary and idiom of the reading matter as far as possible an active vocabulary and idiom for the student. Mere

translation into English will not accomplish this, and the constant writing out of such translation is a useless waste of time. The aim can be accomplished best (1) by frequent reading aloud of the passages already studied; (2) by the memorization of suitable passages; (3) by frequent oral and written reproduction in French of the matter read.

(b) **Sight Translation.** Practice in reading at sight of French passages of moderate difficulty. One or more such passages will be set upon the examination.

The entire work will be covered by one three-hour paper in the proportion of 60% for grammar and 40% for authors; of the 40%, 25% will be allotted to the authors studied and 15% for sight translation.

1, 2, **Grammar and Composition.** Text: *Beginners' French Grammar*, Olmsted and Sirich (Holt).

First Term—Lessons XV-XXXV, together with proportionate part of Verb Review.

Second Term—Lessons XXXVI-LV, Verb Review completed.

Some time will be given in each term to the translation of passages of continuous prose.

3, 4. **Authors.** First Term—The Stories by Bazin, Guy de Maupassant, Theuriet, Erckmann-Chatrian, Coppée, Mérimée, Balzac, France in the volume entitled "French Short Stories," edited by Hills and Holbrook, and published by D. C. Heath and Co. Second Term—*L'Attaque du Moulin* by Emile Zola, in this same volume, and Alphonse Daudet's *Tartarin sur les Alpes*, edited by Kurz, and published by Heath and Co.

5, 6. **Practice and Composition.** Text: French Composition and Pronunciation Exercises, Dubrulle and Mauser (Ginn and Co.). First Term: First Six Lessons in Composition, together with proportionate part of the Exercises de Prononciation. Second Term: Remaining Lessons in Composition, together with similarly proportionate part of the Exercises de Prononciation. A limited portion of time will be given in this term to practical exercises based on *Le Voyage de M. Perrichon* by Labiche et Martin (J. M. Dent and Sons).

7, 8. **Authors.** First Term—Anatole France, *Le Crime de Sylvestre Bonnard*, edited by Borgheroff (Heath), and Racine, *Britannicus*, edited by Pellissier (Macmillan Co. of Canada). Second Term—Balzac, *Eugénie Grandet*, edited by Berthon (Clarendon Press).

9, 10. **Explication de Textes et Composition.** Methods of analysis, oral and written, will be developed by the use of V. Bouillot, *Morceaux Choisis*, (Garçons—Classe de 6e; J. Filles—1re Année Secondaire) in both terms. With this will be associated for purposes of composition and conversation in the Second Term *Le Gendre de M. Poirier*, by Emile Augier, (Collections Nelson).

11, 12. **Seventeenth and Eighteenth Centuries.** First Term—Corneille, *Le Cid*, edited by Warren, published by Heath; Racine, *Bérénice*, edited by Pellissier, published by Oxford University Press; Molière, *Les Précieuses Ridicules*, edited by Toy, published by Heath; and *Les Fourberies de Scapin*, edited by McKenzie and published by Heath, La Bruyère, *Les Caractères*, edited by Warren, and published by Heath. Second Term: Montesquieu, *Lettres Persanes*, edited by Pellissier, published by Macmillan Co. of Canada; Marivaux, *Le Jeu de l'Amour et du Hasard*, edited by Fortier, published by Heath; Diderot, *Selections from*, edited by Giese, published by Heath; Beaumarchais, *Le Barbier de Séville*, edited by Spiers, published by Heath.

GERMAN

German IA—Courses 1, 2.

German I and German IIA—Courses 3, 4.

1, 2. Elementary German.

This course is offered to those who wish to begin a study of the German language. It is a subject in the Junior Division of Arts and Science and is given a credit of 4 units. It may be elected as a second language by students proceeding to the Degree and should be elected by students in the Honor Science Course and by Students desiring to qualify at the end of the Junior Division in Arts and Science for entrance to the Faculty of Medicine.

First Term: Whitney and Stroebe, *A Brief Course in German* (Holt), Lessons 1-30. Zeydel, *An Elementary German Reader* (F. S. Crofts & Co., N.Y.), pp. 1-20.

Second Term: *A Brief Course in German*, completed. *An Elementary German Reader*, completed.

3, 4. German Authors and Practice.

First Term: Zeydel, *A First Course in Written and Spoken German* (F. S. Crofts & Co), Lessons 1-15. Hillern, *Höher als die Kirche* (Copp Clark); *Wilhelmi, Einer muss Heiraten* and *Benedix, Eigensinn*, bound together (Holt), the first comedy. *Lieder, German Poems and Songs* (Oxford Press), Nos. 1-25. Nos. 1, 2, 3, 6, 8, 13, 18 are to be memorized.

The following are suggested for supplementary reading, but need not be purchased: Hagboldt, *Inductive Readings, Book II* (Chicago University Press), *Elz, er ist nicht Eifersüchtig* (Clarke, Irwin & Co., Toronto).

Second Term: *A First Course in Written and Spoken German*, completed. *Frommel, Mit Ränzel und Wanderstab* (Copp Clark); *Benedix, Eigensinn*; *German Poems and Songs*, Nos. 25-50. Nos. 32, 33, 35, 37, 46 are to be memorized.

The following supplementary reading is suggested: *Henning, Klein Heini* (Clark, Irwin & Co., Toronto, or Holt), *Zschokke, Der zerbrochene Krug* (Copp Clark).

HISTORY

Grade XII History and History I—Courses 1, 2.

History II—Courses 3, 4.

History III—Courses 5a, 5b, 6.

History IV—Courses 7, 8.

1. Medieval European History. A general outline of the political development of Europe from the fall of the Western Roman Empire to the outbreak of the French Wars in Italy in 1494. Special emphasis will be placed upon the developments in Germany, Italy, France, and the Eastern Roman Empire. There will be a compulsory question on historical geography. The examination will be based primarily upon the class lectures and upon J. W. Thompson's *History of the Middle Ages* (Norton & Co., New York). High standing will only be granted to those showing clear evidence of further reading. As a basis for this students are referred to the

following: Oman, *The Dark Ages*; Tout, *The Empire and the Papacy* and Lodge, *The Close of the Middle Ages* (Rivingtons, London). Further subsidiary reading will be prescribed from time to time.

2. Modern European History. The history of Europe from the Renaissance to the French Revolution. Text book: J. E. Gillespie, *A History of Europe, 1500-1815*, (Norton & Co., New York).

3, 4. Europe Since 1789. Textbook for the first term: Madelin, *The French Revolution*. For the second term: either Marriott, *History of Europe, 1815-1923* (Methuen) or Grant and Temperley, *Europe in the Nineteenth Century* (Longmans). Other reading will be prescribed as the course proceeds.

5a. American History. This course will attempt to outline the rise and development of the American nation. Students are advised to buy Harlow, *Growth of the United States* (Holt).

The following are the more important topics: The making of the constitution, Jeffersonian and Jacksonian democracy, the struggle over state rights, slavery and the Civil War, Westward expansion, industrial expansion, the tariff and immigration, American Imperialism, relations with the British Empire.

The more important works to which students will be referred are: Channing, *History of the United States*. Macdonald, *Documentary Source Book of American History*. Turner, *The Frontier in American History*. Van Tyne, *Causes of the War of Independence*. Trevelyan, *The American Revolution*. Morison, *History of the United States*. Phillips, *American Negro Slavery*. Paxson, *Recent History of the United States*. Latane, *American Foreign Policy*. Dunning, *Great Britain and the U.S.A.*

5b. General Canadian History up to 1783. Emphasis will be laid upon the following topics: geography, the Indians, the European background, early discovery and exploration, the trading companies, royal government and settlement, Frontenac and western expansion, social and economic conditions in the 18th Century, Anglo-French rivalry, Quebec Act, American Revolution. Students are advised to consult Burpee, *An Historical Atlas of Canada*; Trotter, *A Syllabus and Guide to Reading*; and Lucas, *Historical Geography of Canada, Part I*. General reading: Parkman, *Works*. *Canada and Its Provinces*, *Makers of Canada*, *Chronicles of Canada*, *Cambridge History of British Empire*, vol. VI.

6. General Canadian History Since 1783. The following topics will be emphasised: The coming of the Loyalists, relations with the United States, representative and responsible government, immigration and settlement, the era of the canals and the railways, Confederation, development of political parties, rise of the West, growth of the Dominion, Canada in the *Constitution of Canada*. All students will require a copy of Kennedy, *Commonwealth of Nations*.

General reading and atlas as for Course 5b. The following monographs are important: Van Tyne, *The Loyalists in the American Revolution*; Martin, *Empire and Commonwealth*; Keenleyside, *Canada and the United States*; Smith, *Political Leaders of Upper Canada*; Cowan, *British Immigration to British North America*; Lucas, *Durham's Report*; Morison, *British Supremacy and Canadian Self-Government*; Skelton, *The Backwoodsman*; Skelton, *Life and Times of Sir A. T. Galt*; Trotter, *Canadian Confederation*; Pope, *Memoirs of Sir John A. Macdonald*; Skelton, *Life and Letters of Sir*

Wilfred Laurier; Martin, *Lord Selkirk's Work in Canada*; Innis, *History of the Canadian Pacific Railway*; Kennedy, *Constitution of Canada*; Borden, *Canadian Constitutional Studies*; and Wrong, *Rise and Fall of New France*.

7. British History, Mediaeval. A survey of the political and constitutional development of Britain from the beginnings until 1485. The course will include the following topics: Prehistoric Britain, the Roman period, the settlement of the Anglo-Saxons, the spread of Christianity, the Danish invasions, the institutions of the later Anglo-Saxon period, the Norman Conquest, the administrative and judicial reforms of the Norman and early Angevin kings, Magna Carta, the differentiation of the Curia Regis, the evolution of Parliament, the relations of England with Scotland and France, and the late mediaeval struggle between bureaucracy and oligarchy.

Students will be expected to provide themselves with (1) W. E. Lunt's *History of England* (New York, Harper and Brothers), and (2) G. B. Adams' *Constitutional History of England* (London, Jonathan Cape), and they will be liable to be examined upon the contents of these as well as upon the class lectures.

Students aiming at good standing in the degree examination will further be expected to show evidence of independent reading, and are recommended to make themselves familiar with some of the following works: T. Rice Holmes, *Ancient Britain*; C. O'Rahilly, *Ireland and Wales*; F. Haverfield, *The Romanization of Roman Britain*; R. G. Collingwood, *Roman Britain*; E. T. Leeds, *The Archaeology of the Anglo-Saxon Settlements*; Sir C. W. C. Oman, *England before the Conquest*; E. Lipson, *The Economic History of England*, vol. I; Sir Frederick Pollock, and F. W. Maitland, *History of English Law*; H. W. C. Davis, *England Under the Normans and Angevins*; W. S. MacKechnie, *Magna Carta*; D. Pasquet, *The Origins of the House of Commons*; A. F. Pollard, *The Evolution of Parliament*; T. F. Tout, *Some Conflicting Tendencies in English Administrative History in the Fourteenth Century*; and the chapters on England in the *Cambridge Mediaeval History*.

8. British History, Modern. The main emphasis in the course will be placed upon the following topics: The Tudor monarchy and conciliar government, the growth of Protestantism and its effect upon the relations of Church and State, the struggle for sovereignty between Crown and Parliament, the constitutional outcome of the Revolution and Hanoverian Succession, and the development of cabinet and parliamentary government.

Textbook recommended: G. B. Adams, *Constitutional History of England*.

Students are strongly advised to base their course upon the following reading: Stubbs, *Lectures Upon Modern and Mediaeval History*; Pollard, *Henry VIII*; Prothero, *Statutes and Constitutional Documents, 1559-1625*; Feiling, *History of the Tory Party*; Gooch, *Growth of Democratic Ideas in the Seventeenth Century*; Gardiner, *Cromwell's Place in History*; G. M. Trevelyan, *England Under the Stuarts*; Airy, *Charles II*; Morgan, *Political Leaders and Parties Under Anne*; Grant Robertson, *England Under the Hanoverians*; Mervyn Davies, *George III and the Constitution*.

LATIN

Elementary Latin—Course A.

Latin Grade XI—Course B.

Latin Grade XII and Latin I—Courses 1, 2, 3, 4.

Latin II—Courses 5, 6.

A. **Latin Grammar**—Hamilton and Carlyle—to page 272.

B. **A First Latin Reader**—Beresford—Blackie & Son. Price 60 cents.

Part II—Selections 12-24 inclusive.

Part III—Selections 3, 4, 7, 8 and 9.

Texts: Robertson, Bennett and Glassey: *Ontario High School Latin Reader, Parts III and VI* (Price, .45); Robertson, Bennett and Glassey: *Selections from Virgil*, lines 1-359. (Price, .75.) Hamilton and Carlisle: *Latin Grammar*. (Price, \$1.00.)

The text in grammar should be completed.

Grammatical questions on passages from the prescribed texts will be set, and such other questions as arise naturally from the context.

Translation into Latin of easy sentences with the vocabulary based upon the prescribed Caesar in the *Latin Reader*.

(a) *Caesar, Virgil and Sight* (15% of the marks on this paper may be for Sight Translation).

(b) *Latin Grammar and Composition*.

The following reference books should be read by students, and should be made available for them through the School Library. Students are not expected to buy them:

Fowler: *Julius Caesar* (Heroes of the Nation's Series).

Mackail: *Virgil* (Our Debt to Greece and Rome Series). (Price, \$2.00)

Bulfinch: *The Age of Fable* (Everyman's Library). (Price, .65.)

1, 2. **Grammar, Composition and Sight Translation.** In preparation for this paper students will be expected to provide themselves with D'Ooge: *Concise Latin Grammar* (Ginn & Co.). Questions on Grammar will be set involving a knowledge of forms. In Composition sentences will be given for translation, based on the vocabulary of the prescribed prose authors and on the following principles of syntax: (a) First Term: the common case constructions; indirect statements; purpose clauses; result clauses; participles; direct and indirect questions; direct and indirect commands; intransitive verbs. (b) Second Term: the constructions set down for the First Term; gerund and gerundive; temporal clauses; causal clauses; conditional clauses (regular types); constructions after verbs of *preventing* and *fearing*; subordinate clauses in indirect narration.

(Sets of sentences illustrating the above constructions are available at a nominal cost.)

3, 4. **Authors** (A knowledge of the syntax and subject matter of the Authors read is also required.) First Term: (a) **Aulus Gellius**, *Selected Stories*, edited by Nall (Macmillan's Elementary Classics). Selections VI, VIII, X-XII, XV-XVIII, XXI-XXIII, XXVII-XXX, XXXV, XXXVI. (b) **Livy**, Selections 19-35, edited by Laming (Macmillan's Elementary Classics). Second Term: (a) **Cicero**, *Letters* 1, 2, 3, 5, 8, 11, 12, 13, 15, 16, 20, 23, in *New Cicero* edited by Bennet (Allyn and Bacon). (b) **Ovid**, *Readings from the Metamorphoses* edited by Duthie (Clarke, Irwin & Co., Toronto). Selections 1, 2, 4, 9, 11, 17, 18, 21 (ll. 20-60), 22.

(For purposes of examination Latin shall be regarded as a single subject. Marks will be allotted to the various sections as follows: Prescribed Translation, 35%; Grammar; Syntax and Subject Matter of Prescribed Authors, 20%; Sight Translation, 15%; Prose Composition, 30%.)

5, 6. **Authors and Sight Translation.** A knowledge of the syntax and subject matter of the Authors read is also required. Twenty percent of the paper will be assigned to Sight Translation. First Term: (a) *Livy: Career of Scipio Africanus*, chapters 1-4, 9-11, 39-41, 45-53 (Weatherhead, Cambridge Press). (b) *Catullus*, edited by Macmillan (Junior Latin Series, Press), Nos. 1, 3, 4, 9, 11, 13, 31, 35, 38, 44, 46, 49, 53, 64 (lines 132-250) 70, 73, 84, 85, 93, 96, 101. Second Term: (a) *Cicero, Pro Lege Manilia*, (Bennett, Allyn and Bacon). (b) *Horace, Odes*, Book I, edited by Page, (Macmillan's Elementary Classics), Nos. 1-4, 9, 11, 14, 22, 24, 29, 34, 35, 37, 38.

Students who elect Latin as a subject in the Third and Fourth Years should provide themselves with: A Latin Dictionary (Lewis' *Latin Dictionary for Schools*, Oxford Press), *Latin Literature* (Mackail: Murray), A Classical Atlas (*Atlas of Classical Geography*, Everyman's Library).

MATHEMATICS

Mathematics I and Mathematics, Grade XII—Courses 1, 3 (one paper); 2, 4 (one paper).

Trigonometry—Grade XII, Mathematics IA and IIA—Courses 5, 6.

Mathematics II—Courses 13, 14, 15, 16.

*1, 2. **Algebra.** Text: *An Intermediate Algebra* by Wilson and Warren (Oxford University Press).

3, 4. **Analytic Geometry.** Text: *Analytic Geometry* by Crawley and Evans (University of Pennsylvania, Philadelphia).

First Term—Chapters I, II, III (omitting sections 29, 32, 37).

Second Term—Chapters IV, V (omitting sections 59, 60 and 61).

5, 6. **Trigonometry.** Text: Hall & Knight (Canadian edition).

First Term—Chapters I-VIII, XI.

Second Term—Chapters IX, X, XIII-XV (pp. 204-218), XVII, XVIII.

13, 14. **Analytic Geometry.** Text: Crawley and Evans.

First Term—Chapter III, secs. 29, 32; Chapter V, secs. 60, 61, 57, VI, VII.

Second Term—Chapter VIII, IX (omitting secs. 96, 99, 100, but including hypocycloid of four cusps), XII to p. 224 (omitting secs. 116, 117).

15, 16. **Calculus.** Text: *Calculus for Beginners*, by W. M. Baker (G. Bell and Sons, London).

First Term—To page 54.

Second Term—Pages 55 to 105, inclusive.

PHYSICS

Grade XII—I—Courses 1, 2, 3, 4.

Physics II—Courses 7, 8, 15, 16.

*1, 2. **General Physics.** A lecture course in General Physics, illustrated by demonstration experiments. First Term: Mechanics, Properties of Matter, and Heat. Second Term: Electricity and Light. A knowledge of Grade XI Physics is essential. Text book, "New Practical Physics" by Black and Davis.

3, 4. **General Physics (Practical).** A laboratory course to accompany Lecture courses 1, 2.

EXPERIMENTS

(To be performed by the pupils)

1. The determination of the co-efficient of friction on: (1) A horizontal surface, (2) on an inclined surface.
2. Determine the efficiency, mechanical advantage and velocity ratio of one of the following: (1) differential pulley, (2) jackscrew, (3) wheel and axle, (4) a given system of pulleys.
3. Determine the brake horsepower of a small electric motor or water motor.
4. The relation between the force acting on an elastic body and the displacement produced (Hooke's Law).
5. To determine the resultant of two forces acting at a point, and the condition under which three forces acting at a point can be in equilibrium.
6. To determine the laws of the pendulum and the acceleration due to gravity.
7. To determine the co-efficient of linear expansion of a metal rod.
8. The relation between the volume and temperature of a given mass of gas at constant pressure.
9. The relation between the pressure and temperature of a given mass of gas at constant volume.
10. A study of the phenomena of static electricity:
 - (1) Determine the nature of the charge when various bodies are rubbed together.
 - (2) Charge an electroscope positively also negatively by temporary induction and then by permanent induction.
 - (3) Charge two bodies simultaneously by induction.
 - (4) To show that the amount of the positive charge and the amount of the negative charge induced by a charged body are each equal to the inducing charge.
 - (5) To show that a charge is on the outside surface of a conductor. To determine how the length, diameter and material of a wire affects its resistance.
11. To show the effect on the E.M.F. of series and of parallel arrangement of cells.
12. To electroplate a given body with copper; and the study of the storage battery.
13. Determine the principles of induced currents and self-induction.
14. A study of the direct current generator and of the direct current motor.
15. Determine the focal length of a concave mirror and the characteristics of the images formed by it.
16. Determine the focal length of a convex mirror and the characteristics of the images formed by it.
17. Trace a ray of light through: (1) a rectangular block of glass; (2) a triangular prism of plate glass, and determine the index of refraction in each case.
18. Determine the critical angle for glass, and from this the index of refraction.
19. Determine the focal length of a concave lens and the characteristics of images formed by it.
20. Construct a simple astronomical telescope and measure its magnifying power.
21. Construct a compound microscope and measure its magnifying power.
22. Construct an opera glass and measure its magnifying power.
23. Make a study of the dispersion of sunlight by: (1) looking through a prism at a slit through which sunlight is passing; (2) by observing through

a prism the colored fringes about the edges of opaque objects held against a bright background. (Use simple prism or spectroscope.)

24. Make a study of: (1) Bright line spectrum; (2) Absorption spectrum; (3) Dark line solar spectrum. (Use simple prism or spectro-scope.)

7, 8. **Mechanics, Properties of Matter, Heat and Sound.** An elementary but more detailed treatment of these subjects than Courses 1, 2. Text-books: Elementary Mechanics, Jessop and Havelock, The Tutorial Physics: Heat, Stewart and Satterly, Text-book of Sound, Catchpool

15, 16. **Mechanics, Heat and Sound.** A laboratory course in the theory and methods of physical measurements, to be taken in conjunction with Courses 7 and 8.

POLITICAL ECONOMY

Political Economy III—Courses 3, 4.

Political Economy IV—Courses 5, 6.

3, 4. **Political Economy.** A survey of the leading principles of Political Economy, together with the chief landmarks in the history of Economic Theory. A more intensive study of Wages, Profits, Rents, Value, Money and Banking. The student is expected to read the following, together with the relevant parts of other works that may be referred to in supplement of the lectures.

First Term: Nicholson, "Elements of Political Economy," Intro. and Book I; Book II, Chapters 1 to 4. Mill, "Principles of Political Economy," Prelim. Remarks and Book I; Book II, Chapters 1 to 4. Beckhart, "The Banking System of Canada," pp. 289 to 357. L. L. Price, "Political Economy in England," Chapters 1, 2, 5, 8, 9.

Second Term: Nicholson, Book II, Chapters 6 to 10; Book III, Chapters 1 to 12. Mill, Book II, Chapters 11 to 16; Book III, Chapters 1 to 16, 23, 24, 26. Beckhart, pp. 357 to end. Price, Chapters 3, 4, 6, 7, 10, 11.

5, 6. **Government, Trade and Taxation.** A study of the Economic Functions of Government, Foreign Trade Policy and the Principles of Taxation and Public Expenditure. *First Term:* Adam Smith, "Wealth of Nations," Book II, Chapter 5; Book III, Chapter 1; Book IV, Chapters 1, 2; Book V, Chapter 1. Mill, "Principles of Political Economy," Book III, Chapter 17; Book V, Chapters 1, 8 to 11. Nicholson, "Principles of Political Economy," Vol. III, Book V, Chapters 1 to 4, 14, 19. Bastable, "Theory of International Trade," Chapters 1, 8, 9; and "Commerce of Nations," Chapters 1 to 4, 12 to 15. *Second Term:* Adam Smith, Book IV, Chapters 3 to 8; Book V, Chapter 2. Mill, Book III, Chapters 18 to 22, 25; Book V, Chapters 2 to 6. Nicholson, Vol. III, Book V, Chapters 5 to 13, 15 to 18. Bastable, "Theory," Chapters 2 to 7, 10 and Appendices; "Commerce of Nations," Chapters 5 to 11, 16 to 18. Seligman "Essays in Taxation."

PSYCHOLOGY

Introductory Psychology II—Courses 1, 2.

Social Psychology III—Courses 3, 4.

Experimental Psychology III—Courses 5, 6.

1, 2. **Introductory Psychology.** Woodworth's Psychology (new edition). First Term: to page 242. Second Term: remaining chapters.

3, 4. **Social Psychology.** First Term: Ewer, *Social Psychology*. Second Term: Wright's *Moral Standards of Democracy*.

5, 6. **Experimental Psychology.** A course in general psychology principally from the objective standpoint and including a series of selected laboratory experiments. Text: Perrin, *Psychology, Its Methods and Principles*. This course gives two units of credit in the Third Year and does not require Psychology II as a prerequisite.

SOCIOLOGY

Principles of Sociology—Courses 1, 2.

1, 2. **Sociology.** (a) First Term: Character and Scope of Sociology, and its relations to Biology, Psychology, Social Psychology, History, Political Economy, and the various social sciences. Methods of Investigation. Society and the Individual. Origin and Evolution of Society. Forms of Association. Socializing Processes. Social Organization. History of Sociology.

(b) Second Term: Social Forces, their direction and control. Theory of Social Progress. Social Laws. Social Activities, including conflict and competition, adaptation, exploitation and stratification. Law and Liberty in Society. Relations between various social groups, racial, national, etc. Social Achievement. Social Ends.

Works of Reference: In calling the attention of students to the following list of books bearing on certain of the subjects to be studied, the examiners in Sociology give notice (1) that the list is intended for general guidance only, and that all students should take personal advice as to their reading, and (2) that the examiners are in no way bound by this list.

"The Encyclopaedia of the Social Sciences" (now in course of publication); Giddings, "Principles of Sociology;" Ross, "Principles of Sociology;" Spencer, "The Study of Sociology;" Spencer "Principles of Sociology;" Bagehot, "Physics and Politics;" Muller-Lyer, "History of Social Development;" Barth, "Die Philosophie der Geschichte als Soziologie;" Park and Burgess, "Introduction to Sociology;" R. M. MacIver, "Social Science;" R. M. MacIver, "Community;" Cooley, "Social Organization;" James Ford, "Social Problems and Social Policy;" Dealey, "Sociology; Its Development and Applications;" C. A. Dawson and W. E. Gettys, "An Introduction to Sociology."

ZOOLOGY II

A course intended primarily for teachers of zoology in the High Schools, but acceptable in credit value as equivalent to Zoology II of the regular Science Course.

The course will comprise the structure and physiology of the vertebrate animal, the microscopy of animal tissues, the classification of animals, animal development, Mendelian and Galtonian Inheritance.

The accompanying laboratory work will be carried out so far as possible with local material and the methods of obtaining and preserving such material will be stressed.

SCIENCES (Pre-Medical Course)

The Manitoba Summer School will offer instruction in Physics IIM, Zoology IIM, and Chemistry IIM at the 1932 session of the School should a sufficient demand arise. The classes will be held in the University laboratories on Broadway Avenue, Winnipeg, will begin on May 22nd, and will continue for six weeks. Information regarding fees, hours of instruction, etc., will be forwarded upon application.

MASTER OF ARTS IN EDUCATION

The Council of the University has recently established the degree of Master of Arts in Education, accepting the offer made by the Committee of the Manitoba Summer School to provide instruction in certain courses in the Philosophy and History of Education and in Educational Administration and to supervise educational Research.

The following are the requirements for the degree of Master of Arts in Education:

1. To be accepted as a candidate for the degree of Master of Arts in Education an applicant must have the following qualifications: (a) He must hold the degree of Bachelor of Arts of the University of Manitoba or possess such qualifications as the Committee on Post-Graduate Studies of the General Faculty Council may deem to be equivalent to this degree. (b) He must hold a First Class Professional Teacher's Certificate of the Province of Manitoba or its equivalent as determined by the Department of Education, and must have had a minimum of one year's attendance at an approved normal school*. (c) He must have had at least two years' teaching experience.

2. Application for admission to candidacy for the degree shall be made to the Secretary of the Committee on Post-Graduate Studies of the University of Manitoba and shall be accompanied by a recommendation from its Sub-Committee on Education, covering major and minor courses, and where possible, a thesis subject prepared along the lines set out in 4 below.

3. Candidates for the degree of Master of Arts in Education shall be required to complete eight graduate courses in Education. Courses 1, 2, 3, 4 and 5 (Group I) shall be compulsory for all candidates and shall be designated as the major. Three additional courses, two from Group II and one from Group III shall be selected by the candidate, subject to the approval of the Committee and shall be designated as the minor.

COURSES LEADING TO THE DEGREES OF MASTER OF ARTS IN EDUCATION

Course

Group I

1. School Surveys and Methods of Educational Research.
2. Statistical Methods Applied to Education.
3. General History of Education.
4. Psychology of Elementary and Secondary Education.
5. Mental and Achievement Tests.

Group II

6. Problems of Educational Administration and Supervision.
7. Problems of Teacher Training and Supervision.
8. Problems of Secondary School Organization and Administration.
9. Curriculum Construction.

Group III

10. Special Methods of Instruction in English.
11. Special Methods of Instruction in the Foreign Languages.
12. Special Methods of Instruction in History and Civics.
13. Special Methods of Instruction in Mathematics.
14. Special Methods of Instruction in the Biological or in the Physical Sciences.
15. Problems in Reading and in the Use of the School Library.
16. Health and Physical Education.

(N.B.—As a prerequisite to enrolment in the courses in Special Methods in Group III, the Sub-Committee on Education will demand some special academic qualifications in the subject or subjects involved, looking eventually to the prescription of the Honors B.A. or B.Sc. degree or its equivalent.)

*A deficiency in this respect may be overcome by taking an additional course or courses of graduate work for the degree, as recommended by the Sub-Committee on Education and approved by the Committee on Post-Graduate Studies.

4. Candidates must submit a thesis on some topic which has been approved by the instructor in charge of the course from which the subject is chosen and which has been approved by the Sub-Committee on Education. The thesis must be based on an investigation which involves the use of the objective method. It shall be graded for degree credit by the instructor under whose direction it has been prepared and by two other persons appointed by the Committee on Post-Graduate Studies.

5. To complete the course of study for the degree will require at least two years. Work will be conducted both extra-murally and intra-murally under the direction of the Manitoba Summer School. Students may not register in more than four courses during any one year.

6. Candidates for the degree of Master of Arts in Education shall by a final examination, either oral or written, show proficiency in the whole field of their course. This examination shall be held at such times and under such conditions as the Committee on Post-Graduate Studies shall determine. The pass mark for all written examinations and for the thesis shall be the same as for the M.A. in other departments.

LECTURES OFFERED IN EDUCATION AT THE MANITOBA SUMMER SCHOOL

Session of 1933

Provision has been made for instruction in the following courses:

<i>Course</i>	<i>Lecture Hours</i>
3. General History of Education.....	9.30 a.m.
6. Problems of Education, Administration and Supervision..	8.30 a.m.
9. The Curriculum.....	10.30 a.m.

Lectures will commence on Wednesday, July 12th, and continue until Tuesday, August 22nd.

Registration with the Summer School

The candidate, upon receipt of notice from the Secretary of the Committee on Post Graduate Studies of the University of Manitoba that his application for admission to the course of study in education has been accepted, may select subjects of study for the year from among those being offered at the following session of the Manitoba Summer School. Registration in these subjects may be made with the Dean of the Summer School at his Office at the University of Manitoba before January 2nd, 1933. The fee for each subject is \$15.00, \$5.00 of which shall be paid at the time of registration for extra-mural study and the remainder at the time of registration for the Summer season.

For further information and advice concerning the courses given during the Summer Session communicate with D. S. Woods, Director of the Manitoba Summer School, 360 Kingston Crescent, St. Vital.

Candidates for admission to the Course in Education leading to the degree of Master of Arts should make application to W. J. Spence, Secretary of the Committee on Post-Graduate Studies of the University of Manitoba.

The Term Report

The student will choose or be assigned one problem from each course of study, make an investigation in the literature available, prepare a typewritten report upon his investigation, and present it at the Office of the Secretary of the Summer School, Department of Education, not later than November 15th, 1933.

The standing awarded each student in any subject will be based upon extra-mural exercises, the Summer School examination, and the "Term Paper."

Graduate Library

A library of 500 volumes has been provided through the courtesy of the Department of Education. This will be enlarged as occasion demands. Reference works in education are available to all enrolled as students in the course in education and to others engaged in special research in the field of education.

FEES

The following fees are required, and must be paid on or before July 3rd, 1933, the final day for registration. The academic fee herein set down includes tuition, examination and laboratory privileges. Part subjects will be charged in proportion.

Student Organizations.....	\$ 2.00
University Registration (charged all students writing on University of Manitoba examinations for the first time).....	2.00
Astronomy.....	10.00
Botany.....	15.00
First Class Professional, per subject.....	7.00
Teacher Training, per subject	7.00
Social Psychology.....	10.00
Trigonometry.....	10.00
Senior Division Arts and Science.....	25.00
All other subjects, each.....	20.00
Master of Arts Course (per subject).....	15.00

SUMMER SCHOOL STUDENT ORGANIZATIONS, 1932

Social Committee

Chairman, D. S. Woods (Director); Vice-Chairman, W. B. Beer; Secretary-Treasurer, J. J. Jackson; Misses Frances Malloy, Thelma Balmer, Renata Doern, Ellen L. Giroux, Martha Jeske, Lois McLellan, Doris Goodall, Margery Watson, Helen Horn, Eleanor Vosper, Edna Leishman, Caye Scott, Lottie Dotten, Doreen Hunter, Doris Rankin, Nan Evans, Helen Ball, Caroline Hauk, Hazel Fraser, Ardath Merryweather, Eleanor Steen; Messrs. Victor Dotten, Rex Forster, B. Blanchard, E. I. Fritch, Alvin Cooper, Henry Hyson, Jack Hughes A. M. Young, Desmond White, Gordon Trueman, Reginald Sadler, Stanley Brickman, John McLennan, Frank Harder, C. C. Neufeld, P. M. Livingstone, Allin J. Pybus, J. Fraser, L. Fox, R. S. Broadfoot.

Ladies' Athletic Committee

Chairman, Dorothy Mudge; Secretary, Martha Jeske; Misses Winnie Sutton, Lois Falloon, Ardath Merryweather, Margaret Keough, Ruth Mitchell, Doreen Hunter, Doris Rankin.

Men's Athletic Committee

Chairman, J. Cameron; Secretary, E. Fritch; Messrs. R. Sadler, Dean Finlay, Wes. Graham, G. F. Douglas, G. C. Bricker, A. S. Bridges, R. Lightly, J. McLennan, T. Emerson, J. J. Jackson, A. Pybus, A. Young.

Hard Ball Committee

Chairman, Reg. Sadler, Wes. Graham, Dean Finlay.

Soft Ball Committee

Chairman, Clayton Bricker. Andrew Young, Austin Bridges.

Volley Ball Committee

Chairman, E. I. Fritch. Allin Pybus, Jack McLennan.

Lawn Bowling Committee

Chairman, J. J. Jackson. W. B. Beer, Thos. Emerson.

Football Committee

Chairman, Jack Delmage. Stan. Brickman, Bert Blanchard.

Tennis Committee

Chairman, H. Hyson; Secretary, Phyllis Cates. Thelma Balmer, Marjorie Watson, Bert Blanchard, Robert Libert.

Sunday Service Committee

Chairman, W. B. Beer. Ardath Merryweather, Grace McConnell, Leslie Fox, T. Emerson.

Re-Union Dance Committee

Chairman, E. Fritch; Secretary, Dorothy Mudge. Misses R. Mitchell, C. Scott; Messrs. T. Emerson, J. Hughes, D. S. Woods (Director), W. Tier (Dean), J. J. Jackson.

Student Deans, 1932

Miss Dorothy Mudge, Mr. J. J. Jackson, Mr. T. Emerson.

TOTAL ENROLMENT AT MANITOBA SUMMER SCHOOL, 1932

Women.....	461	
Men.....	439	
	—	900
Winter Classes.....	87	
	—	987

Home Address of Summer Students

Winnipeg and Suburbs.....	491	
Rural Manitoba.....	355	
Saskatchewan.....	43	
Ontario.....	6	
Quebec.....	1	
New Brunswick.....	1	
Alberta.....	2	
United States.....	1	
	—	900
Number of Women in Residence.....	210	
Number of Men in Residence.....	148	
	—	358
Non-Resident Women.....	251	
Non-Resident Men.....	291	
	—	542

Students Taking High School and Methods Courses

Teachers taking Matriculation and Grade XII.....	127	
Teachers taking Elementary School Methods.....	74	
Teachers taking First Class Professional.....	310	
	—	511
High School Students taking Grade XII.....	6	6

Students Taking University Courses and Grade "A"

Teachers.....	118	
Regular University Students.....	365	
Teachers taking Graduate Work in Education.....	25	
	—	508

ENROLMENT BY SUBJECTS, 1932

Teaching of History.....	43
History of Education.....	61
Tests and Measurements.....	65
Philosophy of Education.....	42
Progressive Methods.....	55
Teaching of English.....	40
Principles of Secondary Education.....	58
Introductory Psychology.....	72
Methods in Mathematics.....	14
Methods in Science.....	8
Speech Arts.....	16
Senior Public School Methods.....	14
Primary Methods.....	41
Art.....	10
Music.....	52
Teaching of French.....	52
Astronomy II.....	32
Botany II.....	22
Chemistry XII and I.....	72
Physics XII and I.....	49
English XII and I.....	31
English II.....	45
English III.....	58
English IV.....	41
French Elementary.....	13
French Grade XI.....	16
French Grammar XII and I.....	50
French Authors XII and I.....	42
French II, Practice.....	54
French II, Authors.....	70
German IA.....	30
History XII and I.....	11
History II.....	20
History III.....	26
History IV.....	15
Latin XI.....	7
Latin XII and I, Prose.....	22
Latin XII and I Authors.....	17
Latin II.....	7
Algebra XII and I.....	55
Geometry XII and I.....	50
Geometry II.....	29
Calculus II.....	42
Trigonometry XII and I.....	20
Social Psychology III.....	6
Introductory Psychology.....	8
Economics III.....	23
Pre-medicals.....	42
Engineers.....	37
M.A. Education.....	70
Professional, Winter Classes.....	220
— 1,995	

Students applying for Summer School Courses are required to complete
this application form.

MANITOBA SUMMER SCHOOL

1933

PRELIMINARY APPLICATION FORM

Name in full.....

Address.....

Professional Standing.....

Non-Prof. Standing.....

Present University Standing (if any) and when obtained

If from another Province, state which.....

State here the courses you are applying to take in 1933.

Do you desire University or Departmental credit for these courses?

Do you wish to reside at the College?.....

If not in residence do you wish mid-day lunch in the

College dining room?.....

Date.....Signature.....

